

The Health of Newton:

A Report Submitted to the Newton Health Department

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Executive Summary:

Using data from the Massachusetts Department of Public Health's MassCHIP software (Massachusetts Community Health Information Profile), information on selected health indicators for the City of Newton were compiled. The indicators spanned particular areas of interest for Health Department officials as well as target areas identified by neighboring communities in the context of similar reports. This report summarizes these findings using the most recent data available.

In general, Newton residents have significantly better health outcomes than the state as a whole. In fact, among the scores of indicators examined for this report, not a single one showed Newton to be significantly less healthy than the state. The report provides information about five general health topics: chronic disease, communicable disease, child and maternal health, substance abuse, and violence and injury. Within each section, numerous indicators aggregated from many different sources are presented. The findings summarized here are explained fully in the complete report that follows.

In the area of chronic disease, Newton shows significantly fewer new cases of lung and uterine cancer than state average. New cases of stomach, colorectal and invasive bladder cancer are also lower in Newton. The rates of newly diagnosed oral and thyroid cancer were comparable to state average while new diagnoses of remaining cancer sites were slightly, though not significantly higher in Newton. Among cancer deaths, Newton experienced significantly fewer total deaths due to cancer, as well as those due to lung and brain/central nervous system cancers. The remaining cancer sites were comparable to the state average, with the exception of leukemia, ovarian and pancreatic cancer deaths, which were slightly, though not significantly elevated.

Newton shows similar successes in the area of cardiovascular and other chronic diseases. All categorizations of heart disease (including both hospitalizations and deaths) were either lower than state average or comparable to it. Total hospitalizations due to circulatory system diseases were significantly lower in Newton as compared to the state average. Diabetes, asthma, chronic obstructive pulmonary disease and cirrhosis of the liver (both deaths and hospitalizations) were all significantly lower in Newton.

In the area of communicable disease, among those conditions with data available, Newton is consistently better than the state average. Rates of AIDS, HIV, Chlamydia, Gonorrhea, Hepatitis B and Tuberculosis diagnoses are significantly lower in Newton while Pertussis diagnoses are comparable to the state average.

Numerous child and maternal health indicators show that pregnant women and children in Newton fare much better than their counterparts across the state. The infant mortality rate, along with rates of low and very low birthweight babies are lower in Newton, and rates of beneficial maternal behaviors like breastfeeding and abstaining from cigarettes are higher among Newton women. Newton public school children enjoy higher per-pupil expenditures and a lower high school dropout rate.

In the area of substance abuse, all makers, including hospitalizations, deaths and treatment admissions are lower in Newton than the state as a whole.

Finally, injury and violence data show that Newton is safer than many other Massachusetts communities. Suicides, motor vehicle deaths and hospitalizations due to injury are all lower than the state average.

These data have been collected by various statewide agencies and disseminated for public use. They consistently show that Newton residents make healthy choices, live in a healthy community and consequently suffer from far less disease than state average.

Methods and Definitions:

All included data was found using Massachusetts Community Health Information Portal (MassCHIP) v3 r310 maintained by the Massachusetts Department of Public Health (DPH). MassCHIP is a central clearinghouse for data on various indicators in the Commonwealth. Numerous databases are accessible through MassCHIP, and individual data sources are noted in the footer of the report. Since these databases are created and updated by many different agencies, the date of the most recent data varies by source. The year for which data refers is also listed in the footer of each section.

As with any collection of data, certain caveats are necessary. The data presented here are limited to cases and indicators that were reported to statewide health and human services agencies. Because of this, these data are only representative of those people and populations surveyed and measured. Populations without access to healthcare are underrepresented and likewise populations with abundant access to care are overrepresented. This is important in Newton because higher rates of disease could be due to a number of outside factors unrelated to an actually higher rate of the disease. These factors could include better and more consistent access to care, improved screening measures, and increased reporting among area doctors. Any one of those explanations could account for differences in the rate of disease in Newton. In addition, mortality data is based upon causes of death listed on death certificates. Since these are left to the discretion of the individual physicians, there are likely to be inconsistencies in diagnoses. Persons with an existing diagnosed chronic disease may be more likely to have that condition listed as their primary cause of death whether or not that was the ultimate cause.

Within the report, several commonly used epidemiology and statistical terms are used with uniformity. Most rates presented have been *age adjusted* to allow for comparison with state or national data (see footnotes). Age adjustments take into consideration the age breakdown of the population and adjust the disease rates accordingly. This allows for comparisons with younger (thus healthier) or older (thus less healthy) populations. The term “*significant*” implies a difference at the 95% confidence level (equivalent to $p < 0.05$) or essentially a difference that is not likely due to chance alone. Whenever the term “significant” is not used, the difference (above or below the state average) could be due to chance and thus differences between Newton and the state or vice-versa should be noted with caution. Non-significant differences could be due to a small sample size (i.e. very few people suffered from or died due to the disease) or simply due to yearly fluctuations in the population. Essentially, no concrete conclusions can be made from differences that are not significant. Comparisons within the report are made to statewide data on the same topic from the same calendar year.

Healthy People 2010 (HP2010) is referenced at the conclusion of this report. HP2010 is a national set of health objectives set by the Department of Health and Human Services¹. The objectives noted herein are thus the goals to be met by the nation by the year 2010. Many of the issues addressed here do not have concrete accompanying objectives, and this is noted in the text.

¹ See www.healthypeople.gov for the complete report

Chronic Disease – Cancer Incidence

In the Commonwealth, the statewide Cancer Registry maintains **cancer** data. This database collects information on newly diagnosed cases of cancer but does not follow individuals or track treatment outcomes.

Better Than State Average:

1. **Lung Cancer** (Newton: 47.76 MA: 71.3)*
2. **Uterine Cancer** (Newton: 12.98 MA: 26.06)*
3. **Stomach Cancer** (Newton: 5.79 MA: 8.83)
4. **Colorectal Cancer** (Newton: 43.79 MA: 57.52)
5. **Invasive Bladder Cancer** (Newton: 11.57 MA: 15.15)

State Average:

1. **Cancer of the oral cavity** (Newton: 11.54 MA: 11.33)
2. **Thyroid cancer** (Newton: 8.77 MA: 8.77)

Higher Than State Average:

1. **Total Diagnosed Cancer** (Newton: 519.49 MA: 503.51)
2. **Cancer of the Brain and Central Nervous System** (Newton: 9.13 MA: 7.5)
3. **Invasive breast cancer** (Newton: 181.16 MA: 144.27)
4. **Noninvasive breast cancer** (Newton: 71.57 MA: 50.15)
5. **Leukemia** (Newton: 17.26 MA: 11.5)
6. **Liver Cancer** (Newton: 10.68 MA: 5.27)
7. **Melanoma** (Newton: 21.96 MA: 17.2)
8. **Pancreatic Cancer** (Newton: 17.44 MA: 11.58)
9. **Prostate Cancer** (Newton: 238.23 MA: 190.87)
10. **Testicular Cancer** (Newton: 12.99 MA: 6.2)

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Source: Massachusetts Cancer Registry (2000) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310

Chronic Disease – Cancer Incidence

Marker	Newton⁺	Massachusetts⁺	Newton Count	MA State Count
All Cancer Incidence	519.49	503.51	498	33,379
Invasive Bladder Cancer	11.57	15.15	12	1,020
Bone Cancer			NA	
Brain & CNS Cancer	9.13	7.5	8	487
Breast Cancer (invasive)	181.16	144.27	97	5,216
Breast Cancer (noninvasive)	71.57	50.15	36	1,749
Cervical Cancer			NA	
Colorectal Cancer	43.79	57.52	44	3,888
Leukemia	17.26	11.5	16	761
Liver Cancer	10.68	5.27	10	349
Lung Cancer*	47.76	71.3	47	4,737
Melanoma	21.96	17.2	20	1,134
Oral Cavity Cancer	11.54	11.33	11	745
Ovarian Cancer	21.33	17.35	12	634
Pancreatic Cancer	17.44	11.58	17	779
Prostate Cancer	238.23	190.87	99	5,411
Stomach Cancer	5.79	8.83	6	596
Testicular Cancer	12.99	6.2	5	198
Thyroid Cancer	8.77	8.77	8	573
Uterine Cancer*	12.98	26.06	7	937

⁺ Age adjusted rate per 100,000 people

* Indicates areas in which Newton is significantly different from the state average (p<0.05)

Chronic Disease – Cancer Mortality

Cancer mortality is obtained from the Vital Statistics database at the state level. While the city has more deaths due to leukemia, ovarian cancer and pancreatic cancer, none of these differences are significant.

Better Than State Average:

1. **Total Cancer** deaths (Newton: 174.14 MA: 204.58)*
2. **Brain and Central Nervous System Cancer** deaths (Newton: 0.94 MA: 4.37)*
3. **Lung Cancer** deaths (Newton: 34.59 MA: 55.95)*
4. **Bone Cancer** deaths (Newton: 0 MA: 0.3)
5. **Breast Cancer** deaths (Newton: 19.43 MA: 26.95)
6. **Cervical Cancer** deaths (Newton: 0 MA: 1.56)
7. **Colorectal Cancer** deaths (Newton: 15.46 MA: 21.99)
8. **Liver Cancer** deaths (Newton: 2.96 MA: 4.75)
9. **Oral Cavity Cancer** deaths (Newton: 1.26 MA: 2.89)
10. **Uterine Cancer** deaths (Newton: 2.25 MA: 4.63)
11. **Testicular Cancer** deaths (Newton: 0)
12. **Thyroid Cancer** deaths (Newton: 0)

State Average:

1. **Bladder Cancer** deaths (Newton: 4.18 MA: 5.21)
2. **Melanoma** deaths (Newton: 2.15 MA: 2.74)
3. **Prostate Cancer** deaths (Newton: 27.29 MA: 29.54)
4. **Stomach Cancer** deaths (Newton: 3.97 MA: 5.08)

Higher Than State Average:

1. **Leukemia** deaths (Newton: 11.9 MA: 6.54)
2. **Ovarian Cancer** deaths (Newton: 18.73 MA: 9.95)
3. **Pancreatic Cancer** deaths (Newton: 16.04 MA: 11.74)

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Source: Massachusetts Vital Statistics (2002) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310.

Chronic Disease – Cancer Deaths

	<i>Newton⁺</i>	<i>Massachusetts⁺</i>
All Cancer Deaths*	174.14	204.58
Invasive Bladder Cancer	4.18	5.21
Bone Cancer	0.00	0.3
Brain & CNS Cancer*	0.94	4.37
Breast Cancer (women)	19.43	26.95
Cervical Cancer	0.00	1.56
Colorectal Cancer	15.46	21.99
Leukemia	11.9	6.54
Liver Cancer	2.96	4.75
Lung Cancer*	34.59	55.95
Melanoma	2.15	2.74
Oral Cavity Cancer	1.26	2.89
Ovarian Cancer	18.73	9.95
Pancreatic Cancer	16.04	11.74
Prostate Cancer	27.29	29.54
Stomach Cancer	3.97	5.08
Testicular Cancer	0.00	0.41
Thyroid Cancer	0.00	0.38
Uterine Cancer	2.25	4.63

⁺ Age adjusted rate per 100,000 people

* Indicates areas in which Newton is significantly different from the state average (p<0.05)

Chronic Disease – Cardiovascular Disease

Cardiovascular disease is a blanket term that includes many different syndromes.

Hospitalization estimates are based on discharge diagnoses and mortality data are based on the primary cause of death listed on the death certificate (see Methods for more information).

Better Than State Average:

1. **Circulatory System Disease** hospitalizations (Newton: 1,408.91 MA: 1,786.75)*
2. **Angina** hospitalizations (Newton: 14.22 MA: 28.25)*
3. **Atherosclerosis** hospitalizations (Newton: 32.82 MA: 55.06)*
4. **Coronary Heart Disease** hospitalizations (Newton: 482.46 MA: 615.38)*
5. **Heart Disease** hospitalizations (Newton: 1,049.95 MA: 1,293.76)*
6. **Ischemic Heart Disease** hospitalizations (Newton: 477.87 MA: 603.98)*
7. **Major Cardiovascular Disease** hospitalizations (Newton: 1,341.06 MA: 1,698.82)*
8. **Myocardial Infarction** (heart attack) hospitalizations (Newton: 211.08 MA: 268.17)*

9. **Stroke** hospitalizations (Newton: 190.47 MA: 260.64)*
10. **Circulatory System Disease** deaths (Newton: 213.93 MA: 278.12)*
11. **Atherosclerosis** deaths (Newton: 0.75 MA: 4.02)*
12. **Coronary Heart Disease** deaths (Newton: 117.58 MA: 140.84)*
13. **Heart Disease** deaths (Newton: 152.66 MA: 207.94)*
14. **Heart Failure** deaths (Newton: 13.24 MA: 25.71)*
15. **Ischemic Heart Disease** deaths (Newton: 116.08 MA: 137.66)

State Average:

1. **Hypertension** deaths (Newton: 10.79 MA: 6.3)
2. **Myocardial infarction** (heart attack) deaths (Newton: 51.63 MA: 52.91)
3. **Stroke** deaths (Newton: 39.03 MA: 49.68)

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Hospitalizations Source: Uniform Hospital Discharge Dataset System (UHDDS) (2002) maintained by the Massachusetts Division of Health Care Finance and Policy. From MassCHIP v3 r310.

Mortality Source: Massachusetts Vital Statistics (2002) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310.

Chronic Disease – Cardiovascular Disease

	<i>Newton⁺</i>	<i>Massachusetts⁺</i>
Circulatory System Disease Hospitalizations*	1408.91	1786.75
Angina Hospitalizations*	14.22	28.25
Atherosclerosis Hospitalizations*	32.72	55.06
CHD Hospitalizations*	482.46	615.38
Heart Disease Hospitalizations*	1049.95	1293.76
Hypertension Hospitalizations	26.9	34.38
Ischemic Heart Disease Hospitalizations*	477.87	603.98
Major CVD Hospitalizations*	1341.06	1698.82
MI Hospitalizations*	211.08	268.17
Stroke Hospitalizations*	190.47	260.64
Circulatory System Diseases All Deaths*	213.93	278.12
Atherosclerosis Deaths*	0.75	4.02
CHD deaths*	117.58	140.84
Heart Disease deaths*	152.66	207.94
Heart Failure deaths*	13.24	25.71
Hypertension deaths	10.79	6.30
Ischemic heart disease deaths	116.08	137.66
MI deaths	51.63	52.91
Stroke deaths*	39.03	49.68

⁺ Age adjusted rate per 100,000 people

* Indicates areas in which Newton is significantly different from the state average (p<0.05)

Chronic Disease – Miscellaneous

In this section other chronic diseases not previously mentioned including **diabetes, asthma, cirrhosis of the liver** and **chronic obstructive pulmonary disorder (COPD)** are mentioned.

Better than State Average:

- | | |
|---|--|
| 1. Diabetes hospitalizations (Newton: 68.21 MA: 131.93)* | |
| 2. Diabetes deaths (Newton: 6.98 MA: 20.63)* | |
| 3. Asthma hospitalizations (Newton: 54.66 MA: 128.31)* | |
| 4. Cirrhosis hospitalizations (Newton: 13.75 MA: 36.04)* | |
| 5. Cirrhosis deaths (Newton: 2.34 MA: 9.09)* | |
| 6. COPD hospitalizations (Newton: 182.35 MA: 328.45)* | |

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Hospitalizations Source: Uniform Hospital Discharge Dataset System (UHDDS) (2002) maintained by the Massachusetts Division of Health Care Finance and Policy. From MassCHIP v3 r310.

Mortality Source: Massachusetts Vital Statistics (2002) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310.

Chronic Disease – Miscellaneous

	<i>Newton⁺</i>	<i>Massachusetts⁺</i>
Diabetes Deaths*	6.98	20.63
Diabetes Hospitalizations*	68.21	131.93
Asthma Hospitalizations*	54.66	128.31
Cirrhosis Deaths*	2.34	9.09
Cirrhosis Hospitalizations*	13.75	36.04
COPD Hospitalizations*	182.35	328.45

⁺ Age adjusted rate per 100,000 people

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Communicable Diseases

Data on incidence and prevalence of Communicable Diseases are not widely available through MassCHIP. Data on **AIDS, Chlamydia, Gonorrhea, HIV, Hepatitis B, Syphilis, and Tuberculosis** are maintained at the state level and are thus reported here. Due to confidentiality reasons, communities with fewer than five cases are suppressed. Thus counts of zero actually represent five or fewer cases.

Better Than State Average[#]:

1. **AIDS** (Newton: 0 MA: 11.09)*
2. **Chlamydia** (Newton: 31.02 MA: 163.66)*
3. **Gonorrhea** (Newton: 7.16 MA: 50.59)*
4. **HIV** (Newton: <5 cases MA: 9.43 per 100,000 people)*
5. **Hepatitis B** (Newton: <5 cases State: 0.3 per 100,000 people)*
6. **Syphilis** (Newton: < 5 cases MA: 7.06 per 100,000 people)*
7. **Tuberculosis** (Newton: <5 cases MA: 4.25 per 100,000 people)*

State Average[#]:

1. **Pertussis** (Newton: 26.24 MA: 21.47)

Unadjusted Crude Rates per 100,000 people

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Source: The BCDC Division of Epidemiology and Immunization (2001). From MassCHIP v3 r310.

Communicable Diseases

	Newton [#]	Massachusetts [#]
AIDS Incidence*	0	11.09
Chlamydia Incidence*	31.02	163.66
Gonorrhea Incidence*	7.16	50.59
HIV Incidence*	0 ^{&}	9.43
Hepatitis B Incidence*	0 ^{&}	0.3
Pertussis Incidence*	26.24	21.47
Syphilis Incidence*	0 ^{&}	7.06
Tuberculosis Incidence*	0 ^{&}	4.25

[#] Crude Rate per 100,000 people

[&] Data were suppressed due to confidentiality (fewer than five cases)

* Indicates areas in which Newton is significantly different from the state average ($p < 0.05$)

Maternal and Child Health:

Included in this section are indicators related to the **health of pregnant women, infants, and children up to school age**. Non-traditional indicators such as drop-out rate and school spending are shown as a marker of school success. Note that while none of these variables are statistically significant due to a lack of information on confidence intervals, it is highly likely that many variables would reach significant with the proper information.

Better Than State Average[§]:

1. **Infant Mortality Rate** (Newton: 3.65 MA: 4.92)
2. **Low birthweight Babies** (<2500g) (Newton: 6.33% MA: 7.52%)
3. **Very low birthweight Babies** (<1500g) (Newton: 1.1% MA: 1.4%)
4. **Preterm babies** (<36 weeks) (Newton: 4.62% MA: 5.24%)
5. **Prenatal Care** in the first trimester (Newton: 94.3% MA: 84.2%)
6. **Breastfeeding** (Newton: 92.46% MA: 76.1%)
7. **Cigarette Smoking During Pregnancy** (Newton: 0.97% MA: 7.93%)
8. **High school dropout rate** (Newton: 6.29 per thousand students MA: 35.7)
9. **Per pupil school expenditure** (Newton: \$10,166 MA: \$7,874)

[§] Percentages are of total live births

Source (#1-6) Massachusetts Vital Statistics (2002) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310.

Source (#7-8) Massachusetts Department of Education (2001). From MassCHIP v3 r310.

Maternal and Child Health:

	<i>Newton 2002^{\$}</i>	<i>Massachusetts 2002^{\$}</i>
Infant Deaths All Cause	IMR 3.65	IMR 4.92
Prenatal Care beginning in 1 st trimester	94.3%	84.2%
Low Birth Weight (<2500g)	6.33%	7.52%
Very low birth weight (<1500g)	1.1%	1.4%
Preterm Births (<36 wks)	4.62%	5.24%
Breastfeeding	92.46%	76.10%
Cigarette Smoking during Pregnancy	0.97%	7.93%
	(2001 Newton Public Schools)	(2001 MA)
Per pupil expenditure	\$10,166	\$7,874
High School Dropout	6.29 per thousand students	35.7 per thousand students

^{\$} Percentages are of total live births

Substance Abuse:

While data on **substance use** are not available, admission to state-sponsored treatment facilities, deaths due to substance use and hospitalizations can suggest trends in use levels. In this case, Newton has seen significantly fewer admissions, deaths and hospitalizations than the state average.

Better Than State Average[#]:

1. **Substance abuse treatment admissions** (Newton: 378.15 MA: 1820.02)*
2. **Substance abuse** related deaths (Newton: 6.45 MA: 20.44)*
3. **Substance abuse** related hospitalizations (Newton: 169.04 MA: 353.3)*

Crude Rate per 100,000 people

Source (#1): Department of Public Health Funded Inpatient Drug Treatment Centers (2003). From MassCHIP v3 r310.

(#2): Massachusetts Vital Statistics (2002) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310.

(#3): Uniform Hospital Discharge Dataset System (UHDDS) (2002) maintained by the Massachusetts Division of Health Care Finance and Policy. From MassCHIP v3 r310.

Substance Abuse:

	Newton	Massachusetts
Substance abuse admissions [#] (2003)	378.15	1820.02
Alcohol/Substance related Deaths ⁺ (1998)	6.45	20.44
Alcohol/Substance related Hospitalizations [#] (2002)	169.04	353.5

[#] Crude Rate per 100,000 people

⁺ Age adjusted rate per 100,000 people

Injuries and Violence

Injury and violence data are supplied by hospitalization and mortality registers in the Commonwealth.

Better Than State Average:

1. **Motor vehicle** deaths (Newton: 3.14 MA: 7.59)⁺
2. **Suicide** deaths (Newton: 6.64 MA: 7.8)⁺
3. **Injuries/poisonings** (Newton: 721.63 MA: 847.73)^{*#}

State Average:

1. **Hip fracture** hospitalizations (Newton: 106.47 MA: 100.76)⁺

⁺ Age adjusted rate per 100,000 people

[#] Unadjusted Crude rate per 100,000 people

Mortality Source: Massachusetts Vital Statistics (2002) maintained by the Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation. From MassCHIP v3 r310.

Hospitalization Source: Uniform Hospital Discharge Dataset System (UHDDS) (2002) maintained by the Massachusetts Division of Health Care Finance and Policy. From MassCHIP v3 r310.

Injuries and Violence

	<i>Newton Raw Number</i>	<i>Newton</i>	<i>Massachusetts</i>
Motor vehicle deaths (2002) ⁺	0	0.94	8.59
Suicide deaths (1998) ⁺	7	6.64	7.8
Injuries/poisonings hospitalizations (2002) [#]	702	721.63	847.73
Hip Fracture hospitalizations (2002) ⁺	121	106.47	100.76

⁺ Age adjusted rate per 100,000 people

[#] Unadjusted Crude rate per 100,000 people

Appendix 1: Healthy People 2010:

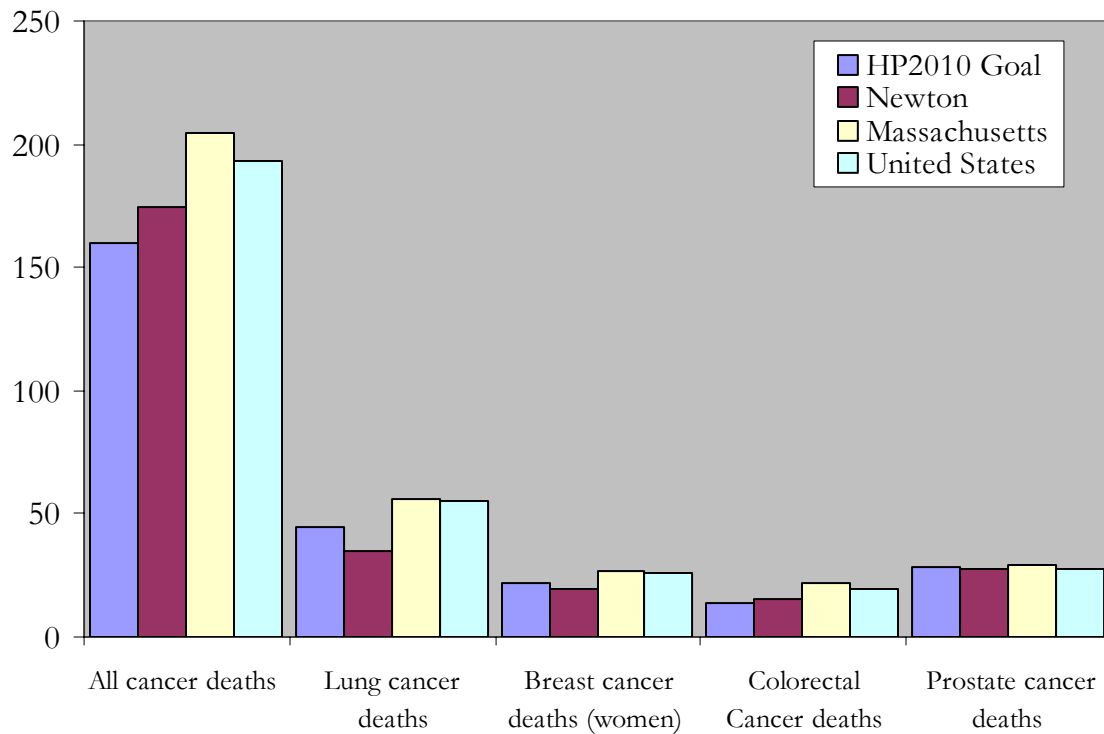
Included in previous sections are indicators that are part of the Healthy People 2010 national health objectives. This section summarizes Newton's progress towards achieving those objectives.

Objective		HP2010 Goal	Newton	Massachusetts	United States
3-1	All cancer deaths	159.9	174.14	204.58	193.50
3-2	Lung cancer deaths	44.9	34.59	55.95	54.9
3-3	Breast cancer deaths (women)	22.3	19.43	26.95	25.6
3-4	Cervical cancer deaths	2	0	1.56	2.6
3-5	Colorectal Cancer deaths	13.9	15.46	21.99	19.7
3-6	Oral Cavity cancer deaths	2.7	1.26	2.89	2.7
3-7	Prostate cancer deaths	28.8	27.29	29.54	27.9
3-8	Melanoma deaths	2.5	2.15	2.74	2.6
12-1	Coronary heart disease deaths	166	117.58	140.84	180
12-6	Congestive heart failure hospitalizations	NA			
12-7	Stroke deaths	48	39.03	49.68	56
5-5	Diabetes deaths	45	6.98	20.63	78
24-2	Asthma hospitalizations	NA	54.66	128.31	NA
26-2	Cirrhosis deaths	3	2.34	9.09	9.4
25.2	Gonorrhea	19	7.16	50.95	125
16-1c	Infant mortality rate	4.5	3.65	4.92	7
16-6a	Prenatal care in first trimester	90%	94.3%	84.2%	84%
16-10a	Low birth weight babies	5%	6.33%	7.52%	7.8%
16-10b	Very low birth weight babies	0.9%	1.1%	1.4%	1.5%
16-11	Preterm births (<36 weeks)	7.6%	4.62%	5.24%	12.1%
16-17c	Cigarette smoking during pregnancy	1%	0.97%	7.93%	11%
16-19a	Breastfeeding	75%	92.46%	76.1%	70%
15-15	Motor vehicle deaths	9.2	3.14	7.59	15.2
15-28	Hip fractures in older Americans	NA			

All rates are age-adjusted

All percentages are of total births in their respective jurisdictions

Cancer:



3-1: Reduce the overall cancer death rate to 159.9 per 100,000

Newton: 174.14 MA: 204.58 US: 193.5

3-2: Reduce the lung cancer death rate to 44.9 per 100,000

Newton: '02: 34.59 MA: 55.95 US: 54.9

3-3: Reduce the breast cancer death rate to 22.3 per 100,000 females

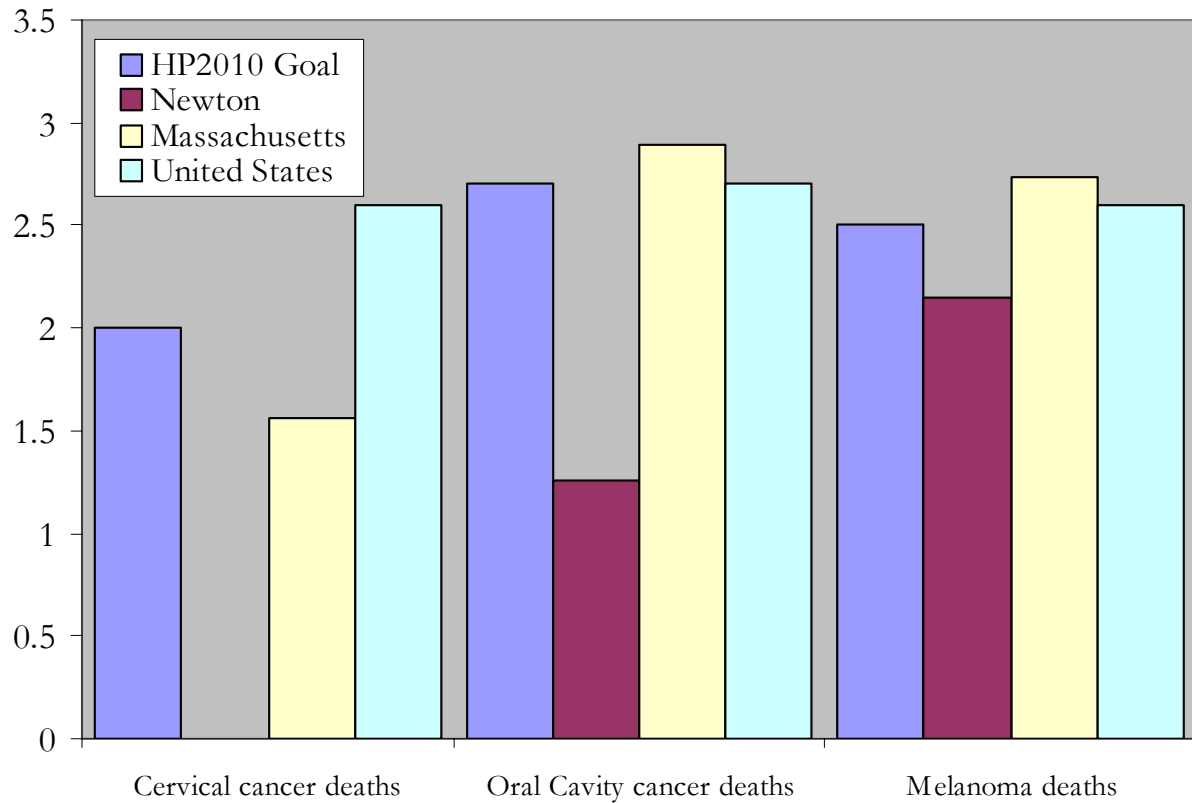
Newton '02: 19.43 MA: 26.95 US: 25.6

3-5: Reduce the colorectal cancer death rate to 13.9 per 100,000**

Newton: 15.46 MA: 21.99 US: 19.7

3-7: Reduce the prostate cancer death rate to 28.8 per 100,000 males

Newton: 27.29 MA: 29.54 US: 27.9



3-4: Reduce the cervical cancer death rate to 2.0 per 100,000 females

Newton: 0 MA: 1.56 US: 2.6

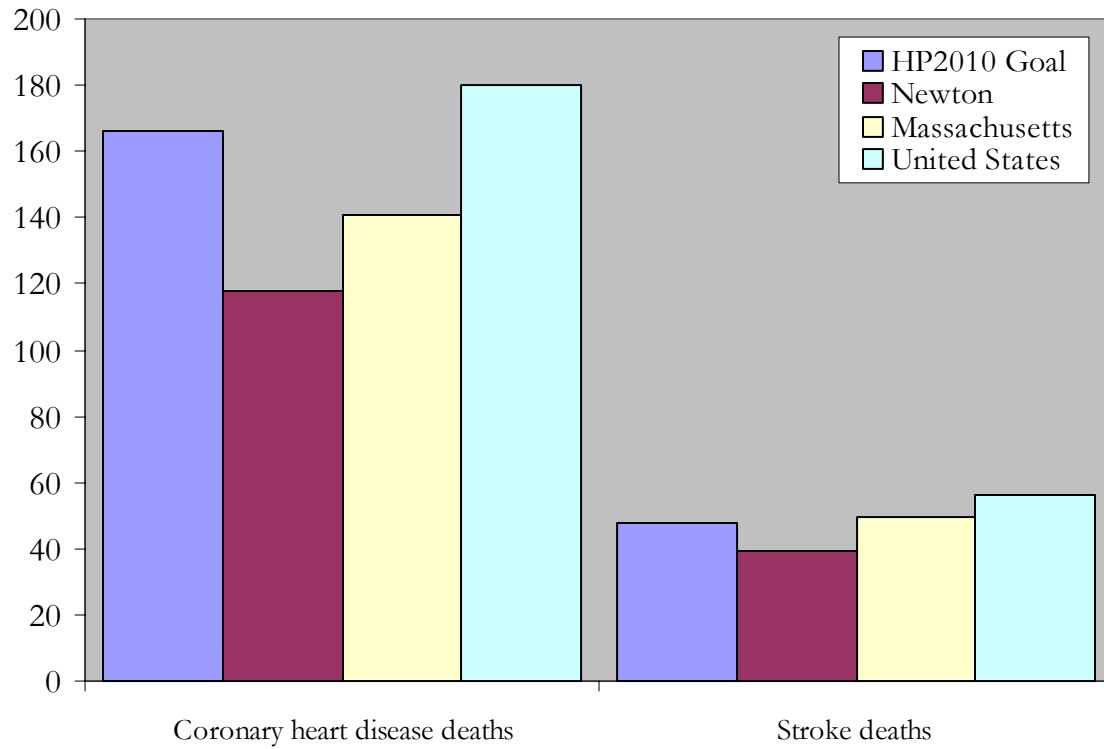
3-6: Reduce the oropharyngeal (oral cavity) cancer death rate to 2.7 per 100,000

Newton: 1.26 MA: 2.89 US: 2.7

3-8: Reduce the melanoma death rate to 2.5 per 100,000

Newton: 2.15 MA: 2.74 US: 2.6

Cardiovascular Disease:



12-1: Reduce deaths due to coronary heart disease to 166 per 100,000

Newton: 117.58 MA: 140.84 US: 180

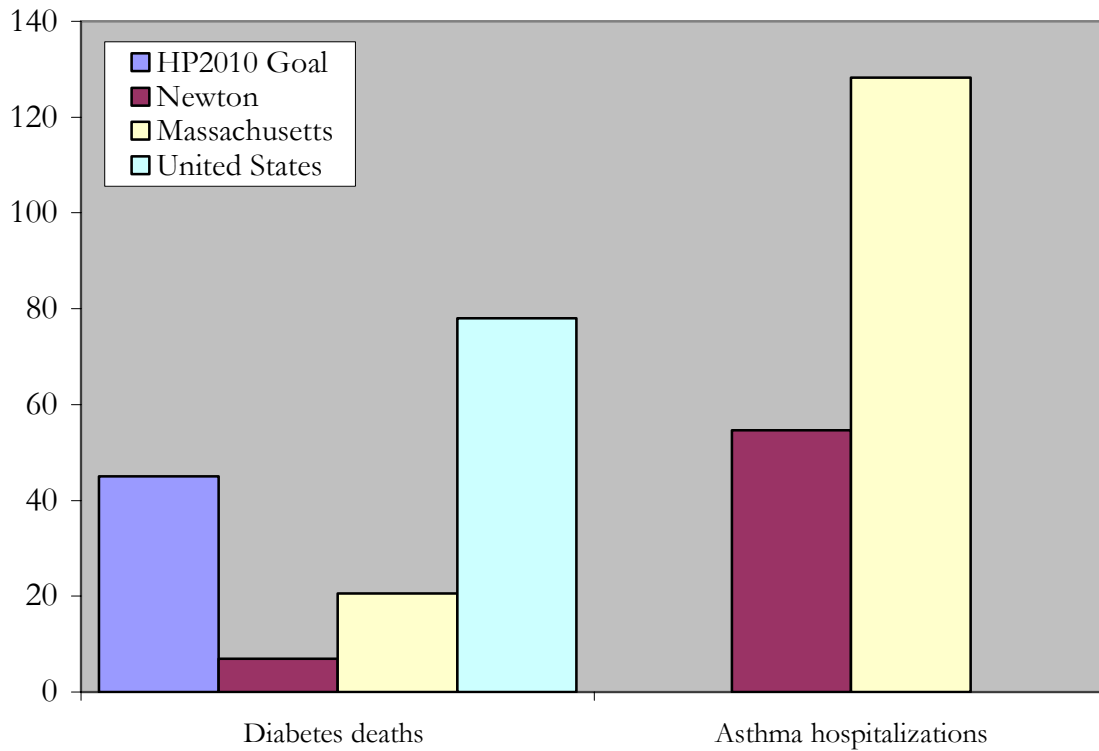
12-6: Reduce hospitalizations of older adults with congestive heart failure

No data available

12-7: Reduce deaths due to strokes to 48 per 100,000

Newton: 39.03 MA: 49.68 US: 56.0

Miscellaneous Chronic Disease:



5-5 Reduce the diabetes death rate to 45 per 100,000

Newton: 6.98 MA: 20.63 US: 78

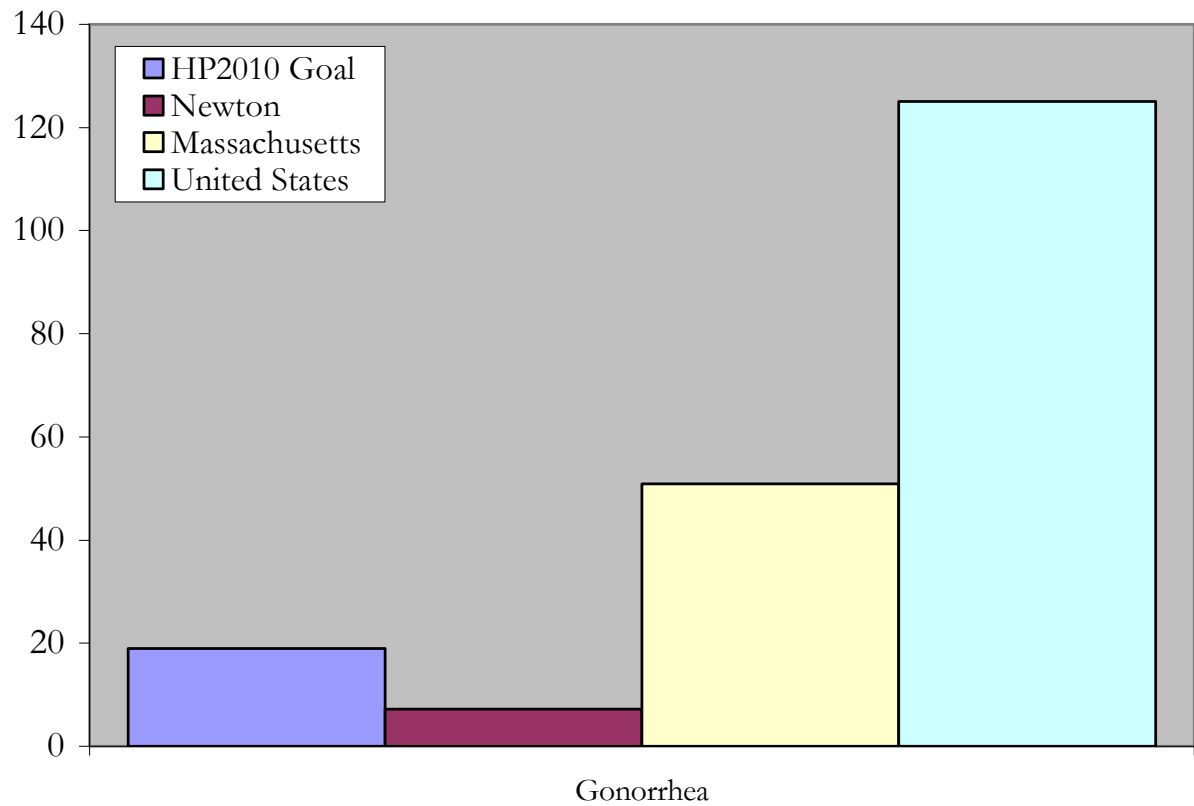
24-2: Reduce the number of asthma hospitalizations

Newton: 54.66 MA: 128.31 US: ND

26-2: Reduce the cirrhosis death rate to 3.0 per 100,000

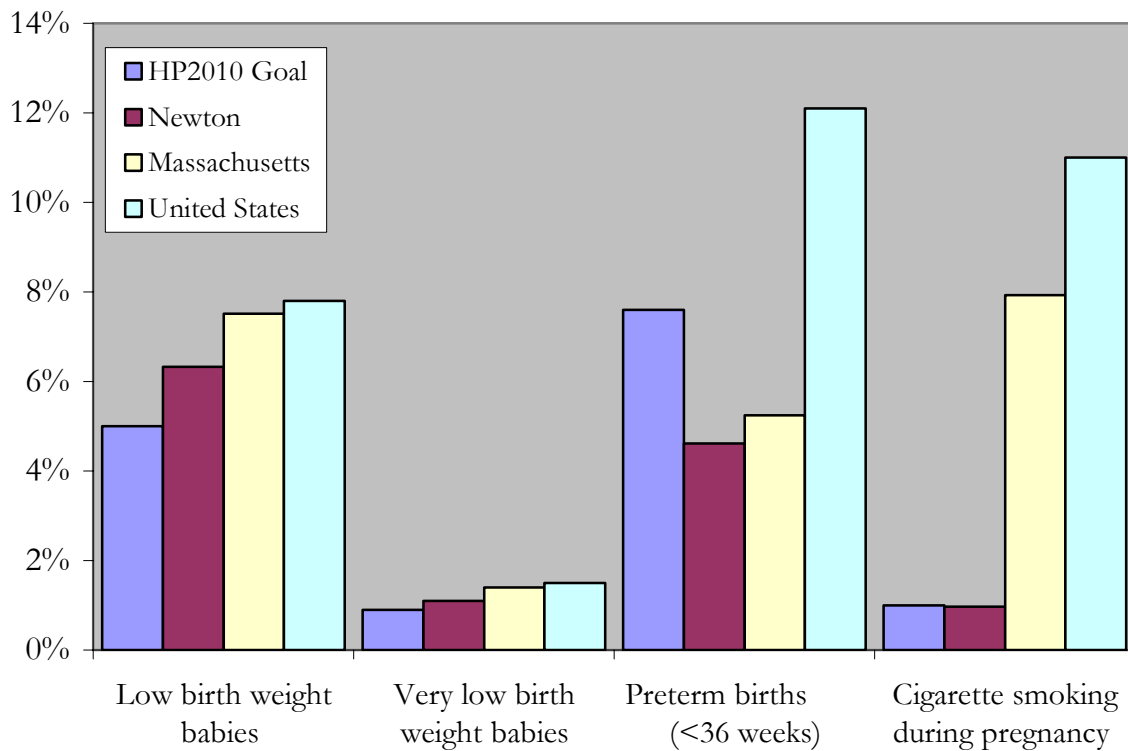
Newton: 2.34 MA: 9.09 US: 9.4

Communicable Disease:



25.2: Reduce new cases of Gonorrhea to 19 per 100,000
Newton: 7.16 MA: 50.59 US: 125

Child and Maternal Health:



16-1c: Reduce infant mortality rate to 4.5 per 1,000 live births

Newton: 3.65 MA: 4.92 US: 7.0

16-10: Reduce low birth weight babies to 5% and very low birth weight to 0.9% of births**

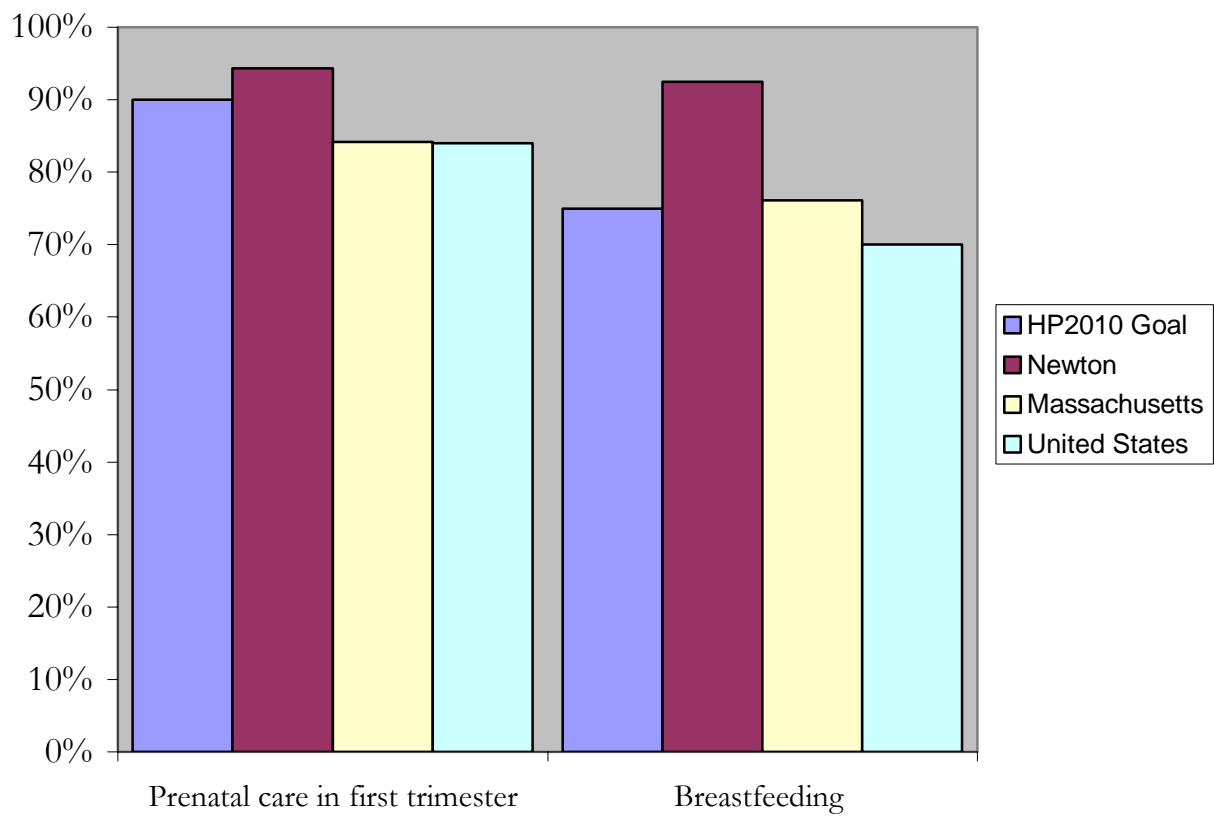
Newton: 6.33%/1.1% MA: 7.52%/1.4% US: 7.8%/1.5%

16-11: Reduce preterm births (<36 weeks) to 7.6%

Newton: 4.62% MA: 5.24% US: 12.1%

16-17c: Reduce the percentage of women smoking cigarettes during pregnancy to 1%

Newton: 0.97% MA: 7.93% US: 11%

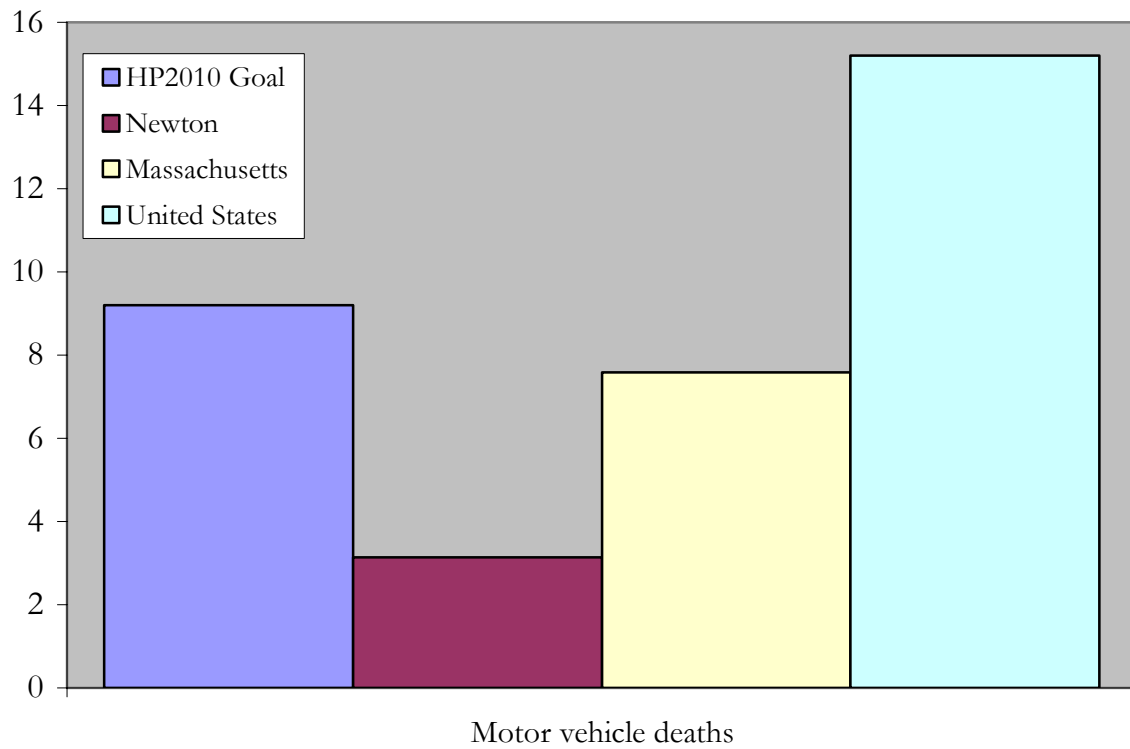


16-6a: Increase the proportion of women receiving prenatal care in first trimester to 90%

Newton: 94.3% MA: 84.2% US: 84%

16-19a: Increase the percentage of women who breastfeed their babies to 75%

Newton: 92.46% MA: 76.1% US: 70%



15-15: Reduce the number of motor vehicle deaths to 9.2 per 100,000 people

Newton: 3.14 MA: 7.59 US: 15.2

15-28: Reduce the number of hip fractures in older Americans

No data available